

Notice of Allowability

Application No.

09/726,345

Examiner

Tara L Garvey

Applicant(s)

CALLAHAN ET AL.

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to remarks filed on 8/3/2004.
2. ☒ The allowed claim(s) is/are 18 and 22-25.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other PTOL-413B.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ken Hemby on August 11, 2004 for the specification changes and with Philip Ketner on August 18, 2004 for the claim changes.

The application has been amended as follows:

In the specification:

"(Did you do this part)" on page 15, line 4 will be deleted.

Under the Results heading on page 16, line 3, "(Table X)" will be deleted.

In Table 4 on page 20, "?" will be deleted after "ml" in the third column heading and after "concordance" in the fifth column heading.

In the claims:

The following new claims are substantially the same as original claims 17 and 19-21:

22. (NEW) A method of detecting the presence of Dengue virus by polymerase chain reaction, said method comprising:

- a) providing the RNA of said Dengue virus or a test sample of RNA suspected of being Dengue virus RNA, RT enzymes, dATPs, dGTPs, dCTPs, dTTPs and buffer containing divalent cations in sufficient

Art Unit: 1636

quantities so reverse transcription of a cDNA copy occurs,

b) providing group specific or serotype-specific primers and probes of
Dengue in sufficient quantities so amplification of a target sequence of
DNA occurs,

c) detecting the presence of the amplification products of the target
sequence of DNA as an indication of the presence of Dengue virus.

23. (NEW) A method of detecting the presence of Dengue-2 virus by polymerase
chain reaction, said method comprising:

a) providing the RNA of said Dengue-2 virus or a test sample of RNA
suspected of being Dengue-2 virus RNA, RT enzymes, dATPs,
dGTPs, dCTPs, dTTPs and buffer containing divalent cations in
sufficient quantities so reverse transcription of a cDNA copy occurs,

b) providing serotype-specific primers and a probe for Dengue-2 virus
in sufficient quantities so amplification of a target sequence of DNA
occurs,

c) detecting the presence of the amplification products of the target
sequence of DNA as an indication of the presence of Dengue-2 virus.

24. (NEW) A method of detecting the presence of Dengue-3 virus by polymerase
chain reaction, said method comprising:

a) providing the RNA of said Dengue-3 virus or a test sample of RNA

Art Unit: 1636

- suspected of being Dengue-3 virus RNA, RT enzymes, dATPs, dGTPs, dCTPs, dTTPs and buffer containing divalent cations in sufficient quantities so reverse transcription of a cDNA copy occurs,
- b) providing serotype-specific primers and a probe for Dengue-3 virus in sufficient quantities so amplification of a target sequence of DNA occurs,
- c) detecting the presence of the amplification products of the target sequence of DNA as an indication of the presence of Dengue-3 virus.

25. (NEW) A method of detecting the presence of Dengue-4 virus by polymerase chain reaction, said method comprising:

- a) providing the RNA of said Dengue-4 virus or a test sample of RNA suspected of being Dengue-4 virus RNA, RT enzymes, dATPs, dGTPs, dCTPs, dTTPs and buffer containing divalent cations in sufficient quantities so reverse transcription of a cDNA copy occurs,
- b) providing serotype-specific primers and a probe for Dengue-4 virus in sufficient quantities so amplification of a target sequence of DNA occurs,
- c) detecting the presence of the amplification products of the target sequence of DNA as an indication of the presence of Dengue-4 virus.

Art Unit: 1636

The following is an examiner's statement of reasons for allowance:

The invention of claim 18 is free of the art after applicants were able to swear behind the previously cited reference. Because the claims 17 and 19-21 were searched as well, the claims were put back into the application as claims 22-25 at the request of the attorney.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Garvey whose telephone number is (571) 272-2917. The examiner can normally be reached on Monday through Friday 9 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel can be reached on (571) 272-0781. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) (<http://pair-direct.uspto.gov>) can now contact the USPTO's Patent Electronic Business Center


Art Unit: 1636

(Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Tara L Garvey
Examiner
Art Unit 1636

TLG



JAMES KETTER
PRIMARY EXAMINER